UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

65913	7590	12/10/2008

NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131

EXAMINER					
CHAN, RICHARD					
ART UNIT	PAPER NUMBER				

2618 DATE MAILED: 12/10/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,775	03/14/2005	Adrianus Van Bezooijen	NL02 0886 US	1786

TITLE OF INVENTION: PRESERVING LINEARITY OF A RF POWER AMPLIFIER

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/10/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where m

appropriate. All further indicated unless correct maintenance fee notifications.	ed below or directed otl	ng the Patent, advance of nerwise in Block 1, by (a	rders and notification a) specifying a new co	of m orresp	naintenance fees w pondence address;	/ill be and/or	mailed to the current (b) indicating a separ	correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
M/S41-SJ	CTUAL PROPERT	Y DEPARTMENT		I her State addre trans	eby certify that th	is Fee(of Mailing or Transus) Transmittal is being ficient postage for first ISSUE FEE address: 1) 273-2885, on the da	nission deposited with the United t class mail in an envelope above, or being facsimile te indicated below.
1109 MCKAY I SAN JOSE, CA								(Depositor's name)
, , , , , , , , , , , , , , , , , , , ,								(Signature)
								(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/527,775 TITLE OF INVENTION	03/14/2005 N: PRESERVING LINEA	ARITY OF A RF POWER	Adrianus Van Bezoo R AMPLIFIER	ijen		I	NL02 0886 US	1786
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSUI	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	•	\$0		\$1810	03/10/2009
EXAM	MINER	ART UNIT	CLASS-SUBCLASS	ASS				
CHAN, R	RICHARD	2618	330-285000					
"Fee Address" inc PTO/SB/47; Rev 03-1 Number is required. 3. ASSIGNEE NAME A PLEASE NOTE: Un recordation as set for	ND RESIDENCE DATA less an assignee is ident th in 37 CFR 3.11. Com	" Indication form led. Use of a Customer A TO BE PRINTED ON 7	data will appear on th	nativingle or agattor I be per or typene pagan a	ely, e firm (having as a gent) and the namneys or agents. If printed. e) ttent. If an assignassignment.	memb es of uj no nam	er a 2o to e is 3	cument has been filed for
4a. The following fee(s) Issue Fee	riate assignee category or are submitted:	41	rinted on the patent): b. Payment of Fee(s): (A check is enclos	Pleas	Individual	orporati ny prev	on or other private gro iously paid issue fee s	up entity Government hown above)
☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).					
a. Applicant claim	i tus (from status indicate ns SMALL ENTITY stati	ıs. See 37 CFR 1.27.		_			TITY status. See 37 CF	
NOTE: The Issue Fee an interest as shown by the	nd Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	ed from anyone other the Office.	an th	ne applicant; a regi	stered a	uttorney or agent; or the	e assignee or other party in
Authorized Signature					Date			
Typed or printed nam	ue		Registration No					
an application Confider	tiality is governed by 35 d application form to the ions for reducing this bu /irginia 22313-1450. DO	IIIS C 122 and 37 CER	1.14 This collection i	e octi	imated to take 12 r	minutec	to complete including	by the USPTO to process) g gathering, preparing, and se you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/527,775	03/14/2005	Adrianus Van Bezooijen	NL02 0886 US	1786	
65913 7	590 12/10/2008		EXAM	INER	
NXP, B.V.		CHAN, RICHARD			
NXP INTELLECTUAL PROPERTY DEPARTMENT			ART UNIT	PAPER NUMBER	
M/S41-SJ 1109 MCKAY DI SAN JOSE, CA 9			2618 DATE MAILED: 12/10/200	8	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 86 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 86 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)	
	10/527,775	VAN BEZOOIJEN ET AL.	
Notice of Allowability	Examiner	Art Unit	
	RICHARD CHAN	2618	
The MAILING DATE of this communication appea. All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 1. This communication is responsive to Claims filed 10/14/08.	(OR REMAINS) CLOSED in or other appropriate comm GHTS. This application is and MPEP 1308.	n this application. If not included unication will be mailed in due course. THIS	
	•		
2. The allowed claim(s) is/are <u>21-29</u> .			
3.	e been received. been received in Application cuments have been received of this communication to file IENT of this application. itted. Note the attached EX ces reason(s) why the oath of the submitted. con's Patent Drawing Review ces Amendment / Comment of the header according to 37 CF sit of BIOLOGICAL MAT	on No In this national stage application from the din this national stage application from the ear reply complying with the requirements. AMINER'S AMENDMENT or NOTICE OF redeclaration is deficient. In (PTO-948) attached In in the Office action of the drawings in the front (not the back) of the Internation is compared to the submitted. Note the	
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6.	formal Patent Application ummary (PTO-413), /Mail Date Amendment/Comment Statement of Reasons for Allowance	

DETAILED ACTION

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance:

Regarding independent claims 21 and 23, Trinh, Fig.2 discloses the method and circuit for preserving linearity of a RF power amplifier, the power amplifier element 50 including a RF power output unit having a characteristic drive level and fed by a supply voltage 12, (Col.3 line 50-57) comprising: measuring the output voltage of the RF power output unit with power detector circuit 32; comparing the measured output voltage to at least one threshold voltage 30 to produce a control signal thru bias driver 36; (Col.3 line 38-49) and reducing the drive level or the supply voltage of the RF power output unit by means of the control signal to operate the output unit below its saturation level of the power controller. (Col.1 line 39-58)

However the prior art does not specifically disclose wherein the RF power unit is a transistor having a base terminal connected to an output terminal of a driver unit providing the drive level and a collector terminal connected to the supply voltage through an inductance, the output being measure at the transistor collector terminal. Fig.4

Specifically, the instant application, page 4, discloses wherein a preferred embodiment preserves the linearity of the amplifier system by measuring the output voltage to at least one threshold voltage; comparing the measured output voltage RF power output to at least one control threshold voltage wherein the measured value of this voltage comparison is then used to produce a control signal; and adapting the drive

Art Unit: 2618

level or the supply voltage of the RF power output unit by means of the control signal to operate the output unit below its saturation unit. (Page 4, lines 22-27) Therefore the amplifier is kept out of saturation by the measuring of the output voltage, and thereby sending a controlling signal to the drive unit at the base of the transistor.

Claims 22, 24-29 are dependent on allowable independent claims 21 and 23.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHARD CHAN whose telephone number is (571)272-0570. The examiner can normally be reached on Mon - Fri (9AM - 5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571)272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/527,775 Page 4

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard Chan/ Examiner, Art Unit 2618 /Nay A. Maung/ Supervisory Patent Examiner, Art Unit 2618